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| 10/643,446 | 08/19/2003 | Wolfgang Bredow | MAY-0018 | 4408 |
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| CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 | | | EXAMINER FERGUSON, MICHAEL P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3679 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,446

Applicant(s)

BREDOW ET AL.

Examiner

Michael P. Ferguson

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06/03/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 (line 2) recites "which spans a common end surface and is sealed there".

It is unclear as to which surface of which element "a common end surface" refers.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkubo et al. (US 5,738,352) in view of Meyer et al. (US 6,709,183).

As to claims 1 and 3, Ohkubo et al. disclose a plastic joint designed to hold a selector pin **60** that is capable of moving around a swivel axis **Y**, the plastic joint comprising: an inner, first joint element **3** and an outer, second joint element **20** for mounting in a device **4A,4B**, wherein the first joint element includes a first (inherently) plastic material with axially opposite end sections **51,52**, and the second joint element includes a second material (bearing in ring **20**; not shown) with borings that lie within the swiveling axis, which hold the end sections such that they form the swiveling axis (Figures 3-4B).

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Ohkubo et al. fail to disclose a plastic joint comprising a second joint element including a second plastic material.

Meyer et al. teach a joint comprising a second joint element **7,8** including a second (rubber elastomer pad) plastic material **11,12** with borings that lie within a swiveling axis, which hold end sections **3,4** of a first, inner joint element **2** such that they form the swiveling axis; wherein directly adjacent to the first joint element, a ring (defined by bearing **11,12**) made of the second plastic material encompasses the selector pin (via the first joint element); the second rubber elastomer plastic pad material providing for a stronger, more durable joint by absorbing high forces perpendicular to the swiveling axis and permitting large angles of torsion around the swiveling axis (column 1 lines 39-43, Figure 10). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. to have a second joint element (bearing in ring **20**; not shown) including a second rubber elastomer plastic pad material as taught by Meyer et al. to provide for a stronger, more durable joint.

As to claim 2, Ohkubo et al. discloses a plastic joint comprising a selector pin **60** that is equipped on a part of its circumference with profiling (key surface **61A,62A**) in which the first joint element **3** is set (Figures 3 and 6).

As to claim 4, Ohkubo et al. in view of Meyer et al. fails to disclose a plastic joint wherein the first plastic material is polyoxymethylene, and the second plastic material is polypropylene.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. in view of Meyer et al. to have a first plastic material comprising polyoxymethylene, and a second plastic material comprising polypropylene as such practice is a design consideration within the skill of the art.

As to claim 5, Ohkubo et al. disclose a plastic joint comprising a seal element (bearing in ring **20**; not shown) that connects the first joint element **3** and a ring (defined by opening **32**) with the second joint element **20** (Figure 3).

As to claim 6, Meyer et al. disclose a plastic joint wherein a seal element (bearing **11,12**) is comprised of a film made of thermoplastic polymer (rubber elastomer).

As to claim 7, Ohkubo et al. disclose a plastic joint wherein the seal element (bearing in ring **20**; not shown) has a restoring function.

As to claim 9, Ohkubo et al. disclose a plastic joint comprising a third joint element **4A,4B** having a second swiveling axis **X** that lies perpendicular to the first swiveling axis **Y**, which engages in end sections **41,42** of the second joint element **20** to form a cardan joint (Figure 3).

As to claim 10, Ohkubo et al. disclose a plastic joint wherein two of the joint elements are combined to form a spherical joint element, which encompasses a selector pin **60** and is held in a retaining element **4A,4B** such that it can swivel in two planes (Figure 3).

As to claim 11, Ohkubo et al. disclose a plastic joint wherein a seal element (inherent; not shown) extends from the selector pin **60** over the retaining element **4A,4B**.

As to claim 12, Ohkubo et al. disclose the use of a plastic joint as a joint in a continuously variable switch in devices for controlling machines (Figure 3).

As to claim 13, Ohkubo et al. disclose a plastic joint wherein the profiling comprises longitudinal grooves **61A,62A** (Figure 6)

Response to Arguments

5. Applicant's arguments filed June 1, 2005 have been fully considered but they are not persuasive.

As to claim 1, Attorney argues that:

Meyer et al. do not teach a plastic joint comprising a second joint element *including a second plastic material*.

Examiner disagrees. As to claim 1, Meyer et al. teach a joint comprising a second joint element **7,8** including a second (rubber elastomer pads) plastic material **11,12** with borings that lie within a swiveling axis, which hold end sections **3,4** of a first, inner joint element **2** such that they form the swiveling axis; the second rubber elastomer plastic pad material providing for a stronger, more durable joint by absorbing high forces perpendicular to the swiveling axis and permitting large angles of torsion around the swiveling axis (column 1 lines 39-43, Figure 10). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. to have a second joint element

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(bearing in ring **20**; not shown) including a second rubber elastomer plastic pad material as taught by Meyer et al. to provide for a stronger, more durable joint.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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08/05/05

Daniel P Stodola

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SUPERVISORY PATENT EXAMINER
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2/4

APPROVED.
MRA
8/5/05

FIG. 2

